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CHICAGO,	IL 60601	-6780	2131		

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/461,487	JUSTER, DORON				
Office Action Summary	Examiner	Art Unit				
	Christian La Forgia	2131				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 13 September 2004.						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	s action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)  Claim(s) 1-36 is/are pending in the application. 4a) Of the above claim(s) 11-15,17,18,22-25,29,32 and 33 is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-10,16,19-21,26-28,30,31 and 34-36 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.						
Application Papers	·					
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☑ The drawing(s) filed on 14 December 1999 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

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### **DETAILED ACTION**

1. The amendment filed on 13 September 2004 has been noted and made of record.

2. Claims 1-36 have been presented for examination.

3. Claims 11-15,17,18,22-25,29,32 and 33 have been cancelled as per Applicant's request.

## Response to Arguments

- 4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features, such as a <u>false</u> off-line error message, upon which applicant relies are not recited in the rejected claims (emphasis added). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Applicant claims that an off-line error message is sent to the client, even though the server is online. Braddy discloses error messages if the server is unable to handle the request, even though the server is on-line. Braddy discloses server unavailable messages at column 4, lines 22-60.
- 5. Applicant's arguments with respect to claims 1-10, 16, 19-21, 26-28, 30, 31, and 34-36 have been considered but are moot in view of the new ground(s) of rejection.
- 6. See further rejections that follow.

### Claim Rejections - 35-USC § 103

- 7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 8. Claims 1, 6, 16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,141,759 to Braddy, hereinafter Braddy, in view of U.S. Patent No. 6,078,960 to Ballard, hereinafter Ballard.

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9. As per claim 1, Braddy teaches a computer-implemented method for an on-line server responsive to a client, the method comprising:

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determining whether the server is inappropriate to fulfill the request based on the client (Figure 8a [block 208], 8b [block 220]; column 12, lines 21-58; column 12, lines 46-56);

if the server determines that the server is inappropriate to fulfill the request, sending an error message to the client, the error message identifying the server as being off-line, even though the server is on-line, to enable the client to send the request to a next server on the list of servers (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

- 10. Braddy does not teach determining whether the server is inappropriate to fulfill the request based on the client being a non-delegable client that does not understand a delegation of the request to another server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.
- 11. Braddy does not teach receiving a request from the client, the server being chosen from a list of servers maintained by the client.
- 12. Ballard discloses receiving a request from the client, the server being chosen from a list of servers maintained by the client (Figure 6 [blocks 52, 56, 58], column 6, lines 31-59).
- 13. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the client to maintain the list of servers, since Ballard discloses at column 1, lines

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31-67 that such a modification would provide for a more reliable, more flexible technique for

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achieving load balancing of client demand.

14. As per claim 6, Braddy teaches a machine-readable medium having instructions stored

thereon for execution by a processor of a client to perform a method comprising:

receiving a response to the request from the server (Figures 8a [block 200], 9a [block

242], 10 [block 298]; column 12, lines 8-19; column 13, lines 61-64);

upon determining that the response comprises an error message that the server is off-line,

even though the server is online, when the server is inappropriate to fulfill the request,

automatically repeating the sending of the request to a next server of the list until the error

message is not received (Figures 8c [blocks 230, 232], 9b [blocks 268, 272], 11b [block 354], 13

[block 396]; column 13, lines 32-43; column 14, line 66 to column 15, line 22; column 22, lines

7-9).

15. Braddy does not teach wherein the client is a non-delegable client that does not

understand a delegation of the request to another server. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to provide a means to determine

whether the client's request could be passed over to another server or not, since Braddy discusses

transferring the client's request to another server it would only require ordinary skill in the art to

make a determination if the client could handle such a transfer.

16. Braddy does not teach sending a request to a server, the server being chosen from a list of

servers maintained by the client.

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17. Ballard discloses sending a request to a server, the server being chosen from a list of

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servers maintained by the client (Figure 6 [blocks 52, 56, 58], column 6, lines 31-59).

18. It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the client to maintain the list of servers, since Ballard discloses at column 1, lines

31-67 that such a modification would provide for a more reliable, more flexible technique for

achieving load balancing of client demand.

19. As per claim 16, Braddy teaches a client computer comprising:

a communications device (Figure 2 [block 38]; column 2, lines 20-37); and,

a computer program designed to automatically repeat sending a request to a different

server of a list of servers via the communications device, the automatic repeat sending is

responsive to an off-line error message indicating that a server is offline received from on-line

servers that determine that the client computer is incapable of receiving delegated responses to

requests (Figure 9b [blocks 268, 272]; column 14, line 66 to column 15, line 22).

20. Braddy does not teach wherein the client is a non-delegable client that does not

understand a delegation of the request to another server. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to provide a means to determine

whether the client's request could be passed over to another server or not, since Braddy discusses

transferring the client's request to another server it would only require ordinary skill in the art to

make a determination if the client could handle such a transfer.

21. Braddy does not disclose wherein the client maintains the list of servers.

- 22. Ballard discloses wherein the client maintains the list of servers (Figure 6 [blocks 52, 56, 58], column 6, lines 31-59).
- 23. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the client to maintain the list of servers, since Ballard discloses at column 1, lines 31-67 that such a modification would provide for a more reliable, more flexible technique for achieving load balancing of client demand.
- 24. As per claim 19, Braddy teaches a machine-readable medium having instructions stored thereon for execution by a processor of a server to perform a method comprising:

receiving a request from a client (Figures 8a [block 200], 9a [block 242], 10 [block 298]; column 12, lines 8-19; column 13, lines 61-64);

determining whether the server is inappropriate to fulfill the request (Figure 8a [block 208], 8b [block 220]; column 12, lines 21-58; column 12, lines 46-56);

upon determining that the server is inappropriate to fulfill the request due to the client being non-delegable sending an off-line error message to the client, even though the server is online, wherein said off-line error message causes the client to forward the request to an alternative server (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

25. Braddy does not teach determining whether the client is a non-delegable client that does not understand a delegation of the request to another server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses

transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.

- 26. Braddy does not disclose wherein the client maintains the list of servers.
- 27. Ballard discloses wherein the client maintains the list of servers (Figure 6 [blocks 52, 56, 58], column 6, lines 31-59).
- 28. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the client to maintain the list of servers, since Ballard discloses at column 1, lines 31-67 that such a modification would provide for a more reliable, more flexible technique for achieving load balancing of client demand.
- 29. With regards to claim 20, Braddy teaches the method further comprising:

  upon determining that the server is inappropriate to fulfill the request and that the client is

  of the type capable of understanding a delegation, delegating the request to another server

  (Figure 9b [blocks 268, 272]; column 14, line 66 to column 15, line 22).
- 30. Braddy does not teach determining whether the client is of a type capable of understanding a delegation of the request. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.

- Regarding claim 21, Braddy teaches the method further comprising upon determining that the server is appropriate to fulfill the request, fulfilling the request (Figure 8c [blocks 238, 240], 9a [block 265]; column 13, lines 22-31).
- 32. Claims 26-28, 30, 31, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,141,759 to Braddy, hereinafter Braddy.
- 33. As per claim 26, Braddy teaches a machine-readable medium having instructions stored thereon for execution by a processor to transform a general purpose computer to a special purpose computer comprising:

a communication device (Figure 2 [block 38]; column 2, lines 20-37);

means for sending via the communications device an error message that a computer is off-line in response to a request (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

34. Braddy does not teach means for sending via the communications device an error message that a computer is off-line in response to a request from a non-delegable client that does not understand a delegation of the request to another server when the computer is on-line but is inappropriate to fulfill the request. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.

- 35. Regarding claim 27, Braddy teaches wherein the means is further for delegating the request to another computer via the communications device in response to a request from a client of a second predetermined type when the computer is inappropriate to fulfill the request (Figure 9b [blocks 268, 272]; column 14, line 66 to column 15, line 22).
- 36. With regards to claim 28, Braddy teaches wherein the means is further for fulfilling the request when the computer is appropriate to fulfill the request (Figure 8c [blocks 238, 240], 9a [block 265]; column 13, lines 22-31).
- 37. As per claim 30, Braddy teaches a method for a server, the method comprising: receiving a request from a client (Figures 8a [block 200], 9a [block 242], 10 [block 298]; column 12, lines 8-19; column 13, lines 61-64);

determining whether the request can be fulfilled locally (Figure 8a [block 208], 8b [block 220]; column 12, lines 21-58; column 12, lines 46-56); and

if the request cannot be fulfilled locally, sending an error message indicating that the server is off-line, even though the server is on-line, to enable the non-delegable client to send the request to a next server (Figures-8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column-13, lines 32-43; column 22, lines 7-9).

38. Braddy does not teach receiving a request from a non-delegable client that does not understand a delegation of the request to another server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses

transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.

39. As per claim 31, Braddy teaches a method for enabling non-delegable clients to exist in a client-server architecture having servers that do not maintain enterprise-wide directory service-related information, the method comprising:

responding to the client by determining whether the request can be fulfilled (Figure 8a [block 208], 8b [block 220]; column 12, lines 21-58; column 12, lines 46-56); and

if the request cannot be fulfilled, sending an error message, indicating that the server is off-line, even though the server is on-line, wherein said off-line error message results in the non-delegable client determining that the server is unavailable to receive the request (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

40. Braddy does not teach providing each of the servers in the client-server architecture with computer-implemented instructions enabling the server to determine of a client from which the server receives a request is a non-delegable client that does not understand a delegation of the request to another server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.

41. As per claim 34, Braddy teaches a server computer comprising:

a communications device (Figure 2 [block 38]; column 2, lines 20-37); and,

a computer program with computer-implemented instructions enabling the server

computer to perform:

responding to the client by determining whether the request can be fulfilled (Figure 8a [block 208], 8b [block 220]; column 12, lines 21-58; column 12, lines 46-56);

if the request cannot be fulfilled, responding by providing that the communications device send an error message to the non-delegable client, indicating that the server is off-line, even though the server is on-line, that will cause the client to send the request to an alternative server computer (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

- 42. Braddy does not teach determining whether a client from which the server receives a request is a non-delegable client that does not understand a delegation of the request to another server. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means to determine whether the client's request could be passed over to another server or not, since Braddy discusses transferring the client's request to another server it would only require ordinary skill in the art to make a determination if the client could handle such a transfer.
- 43. Regarding claim 35, Braddy teaches wherein the computer program is further designed to delegate the request to another server computer via the communications device in response to a request from a delegable client that understands a delegation of the request to another server

when the server computer is inappropriate to fulfill the request (Figures 8c [blocks 230, 232], 11b [block 354], 13 [block 396]; column 13, lines 32-43; column 22, lines 7-9).

- 44. Regarding claim 36, Braddy teaches wherein the computer program is further designed to fulfill the request when the server computer is appropriate to fulfill the request (Figure 8c [blocks 238, 240], 9a [block 265]; column 13, lines 22-31).
- 45. Claims 2, 3, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braddy in view of Ballard as applied above, and in further view of U.S. Patent No. 5,535,322 to Hecht, hereinafter Hecht.
- 46. Regarding claim 2 and 7, Braddy does not teach wherein receiving the request from the client comprises generating the request at a query manager of the client.
- Hecht teaches wherein receiving the request from the client comprises generating the request at a query manager of the client (Abstract; Figure 4; column 8, lines 34-54). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include queue manager of Hecht at the client of Braddy, because it would enable a quicker and more efficient way to find an appropriate server to service the client's request. One-would-be-motivated to combine the queue manager at the client of Braddy because it would assist outgoing and incoming requests without slowing down the system.

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- 48. With regards to claims 3 and 8, Braddy does not teach wherein receiving the request from the client receives the request from the query manager at an application programming interface (API) of the client.
- 49. Hecht teaches wherein receiving the request from the client receives the request from the query manager at an application programming interface (API) of the client (Figures 10 & 11; column 15, lines 33-47). It would have been obvious to one with ordinary skill in the art at the time the invention was made to include the API of Hecht at the client of Braddy, because it would enable a quicker and more efficient way to manage the various client's requests. One would be motivated to combine the APIs of Hecht at the client of Braddy because they offer an interface to better manage incoming and outgoing requests, instead of having the system manage the requests in the background.
- 50. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braddy in view of Ballard as appliedabove, and further in view of Hecht in view of U.S. Patent No. 5,884,301 to Takano, hereinafter Takano.
- 51. Concerning claims 4 and 9, neither Braddy nor Hecht disclose wherein the request from the client is received from the API at a component of the client that maintains the list-of servers.
- Takano teaches wherein the request from the client is received from the API at a component of the client that maintains the list of servers (Figures 2, 3, 4, & 5; column 4, lines 1-10; column 4, line 65 to column 5, line 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the delegation means of Takano at the client of Braddy and Hecht, because it would enable a quicker means to resolve which server

should respond to the client's request. One would be motivated to combine the delegation of Takano with the current system because it encourages the servers to communicate and be knowledgeable of the servers around them.

- 53. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braddy in view of as applied to claim 1 above, and further in view of U.S. Patent No. 5,617,570 to Russell et al., hereinafter Russell.
- 54. Regarding claims 5 and 10, Braddy does not teach wherein sending the request from the client further comprises sending the request using a remote procedure call of the client.
- 55. Russell teaches wherein sending the request from the client further comprises sending the request using a remote procedure call of the client (Abstract; column 3, lines 53-65). It would have been obvious to one with ordinary skill in the art at the time the invention was made to include the remote procedure calls of Russell at the client of Braddy because it would enable a quicker and more efficient way for client's requests to be passed off to the appropriate server.

### Conclusion

- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS-MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 57. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.

  The examiner can normally be reached on Monday thru Thursday 7-5.
- 59. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christian LaForgia Patent Examiner Art Unit 2131

Clf / LT

Gruy J. Lamaure Primary Examiner